

NOTICE OF DRAFTSPERSON'S PATENT DRAWING REVIEW

The drawing(s) filed (insert date) 8/27/99A. ☒ Approved by the Draftsperson under 37 CFR 1.84 or 1.152.B. ☐ Subjected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawing must be submitted according to the instructions on the back of this notice.C. ☐ Color drawing(s) not acceptable until person is granted.D. ☐ Pencil and not black ink not permitted. Fig(s) 1E. ☐ Words do not appear on a horizontal, left-to-right fashion when paper is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) 1F. ☐ Scale not large enough to show mechanism without crowding when drawing is reduced to size to two-thirds in reproduction. Fig(s) 1G. ☐ Character of lines, numbers, & letters not uniformly thick and well defined, clean, legible, and black (post line quality). Fig(s) 1H. ☐ Shading not permitted. Fig(s) 1I. ☐ Solid black shading not permitted. Fig(s) 1J. ☐ Shading lines, post, rough and blurred. Fig(s) 1K. ☐ Numbers and reference characters not plain and legible. Fig(s) 1L. ☐ Figure legends are poor. Fig(s) 1M. ☐ Numbers and reference characters not oriented in the same direction as the view. Fig(s) 1N. ☐ English alphabet not used. Fig(s) 1O. ☐ Symbols, letters and reference characters must be at least 3/32 in (1/16 in) high. Fig(s) 1P. ☐ Corrections not made from prior PTO-648 dated 8/27/99. Fig(s) 1Q. ☐ Lead lines cross each other. Fig(s) 1R. ☐ Lead lines missing. Fig(s) 1S. ☐ Numbering of sheets of drawings. 37 CFR 1.84(i)T. ☐ Sheets not numbered consecutively, and in Arabic numerals beginning with number 1. Sheet(s) 1U. ☐ Numbering of views. 37 CFR 1.84(j)V. ☐ Views not numbered consecutively, and in Arabic numerals beginning with number 1. Fig(s) 1W. ☐ Corrections. 37 CFR 1.84(k)X. ☐ Corrections not made from prior PTO-648 dated 8/27/99. Fig(s) 1Y. ☐ Design drawings. 37 CFR 1.152Z. ☐ Surface shading shown not appropriate. Fig(s) 1AA. ☐ Solid black shading not used for entire contours. Fig(s) 1AB. ☐ Sectional drawings. 37 CFR 1.152AC. ☐ Surface shading shown not appropriate. Fig(s) 1AD. ☐ Solid black shading not used for entire contours. Fig(s) 1AE. ☐ Sectional drawings. 37 CFR 1.152AF. ☐ Surface shading shown not appropriate. Fig(s) 1AG. ☐ Solid black shading not used for entire contours. Fig(s) 1AH. ☐ Sectional drawings. 37 CFR 1.152AI. ☐ Surface shading shown not appropriate. Fig(s) 1AJ. ☐ Solid black shading not used for entire contours. Fig(s) 1AK. ☐ Sectional drawings. 37 CFR 1.152AL. ☐ Surface shading shown not appropriate. Fig(s) 1AM. ☐ Solid black shading not used for entire contours. Fig(s) 1AN. ☐ Sectional drawings. 37 CFR 1.152AO. ☐ Surface shading shown not appropriate. Fig(s) 1AP. ☐ Solid black shading not used for entire contours. Fig(s) 1AQ. ☐ Sectional drawings. 37 CFR 1.152AR. ☐ Surface shading shown not appropriate. Fig(s) 1AS. ☐ Solid black shading not used for entire contours. Fig(s) 1AT. ☐ Sectional drawings. 37 CFR 1.152AU. ☐ Surface shading shown not appropriate. Fig(s) 1AV. ☐ Solid black shading not used for entire contours. Fig(s) 1AW. ☐ Sectional drawings. 37 CFR 1.152AX. ☐ Surface shading shown not appropriate. Fig(s) 1AY. ☐ Solid black shading not used for entire contours. Fig(s) 1AZ. ☐ Sectional drawings. 37 CFR 1.152BA. ☐ Surface shading shown not appropriate. Fig(s) 1BB. ☐ Solid black shading not used for entire contours. Fig(s) 1BC. ☐ Sectional drawings. 37 CFR 1.152BD. ☐ Surface shading shown not appropriate. Fig(s) 1BE. ☐ Solid black shading not used for entire contours. Fig(s) 1BF. ☐ Sectional drawings. 37 CFR 1.152BG. ☐ Surface shading shown not appropriate. Fig(s) 1BH. ☐ Solid black shading not used for entire contours. Fig(s) 1BI. ☐ Sectional drawings. 37 CFR 1.152BJ. ☐ Surface shading shown not appropriate. Fig(s) 1BK. ☐ Solid black shading not used for entire contours. Fig(s) 1BL. ☐ Sectional drawings. 37 CFR 1.152BM. ☐ Surface shading shown not appropriate. Fig(s) 1BN. ☐ Solid black shading not used for entire contours. Fig(s) 1BO. ☐ Sectional drawings. 37 CFR 1.152BP. ☐ Surface shading shown not appropriate. Fig(s) 1BQ. ☐ Solid black shading not used for entire contours. Fig(s) 1BR. ☐ Sectional drawings. 37 CFR 1.152BS. ☐ Surface shading shown not appropriate. Fig(s) 1BT. ☐ Solid black shading not used for entire contours. Fig(s) 1BU. ☐ Sectional drawings. 37 CFR 1.152BV. ☐ Surface shading shown not appropriate. Fig(s) 1BW. ☐ Solid black shading not used for entire contours. Fig(s) 1BX. ☐ Sectional drawings. 37 CFR 1.152BY. ☐ Surface shading shown not appropriate. Fig(s) 1BZ. ☐ Solid black shading not used for entire contours. Fig(s) 1CA. ☐ Sectional drawings. 37 CFR 1.152CB. ☐ Surface shading shown not appropriate. Fig(s) 1CC. ☐ Solid black shading not used for entire contours. Fig(s) 1CD. ☐ Sectional drawings. 37 CFR 1.152CE. ☐ Surface shading shown not appropriate. Fig(s) 1CF. ☐ Solid black shading not used for entire contours. Fig(s) 1CG. ☐ Sectional drawings. 37 CFR 1.152CH. ☐ Surface shading shown not appropriate. Fig(s) 1CI. ☐ Solid black shading not used for entire contours. Fig(s) 1CJ. ☐ Sectional drawings. 37 CFR 1.152CK. ☐ Surface shading shown not appropriate. Fig(s) 1CL. ☐ Solid black shading not used for entire contours. Fig(s) 1CM. ☐ Sectional drawings. 37 CFR 1.152CN. ☐ Surface shading shown not appropriate. Fig(s) 1CO. ☐ Solid black shading not used for entire contours. Fig(s) 1CP. ☐ Sectional drawings. 37 CFR 1.152CQ. ☐ Surface shading shown not appropriate. Fig(s) 1CR. ☐ Solid black shading not used for entire contours. Fig(s) 1CS. ☐ Sectional drawings. 37 CFR 1.152CT. ☐ Surface shading shown not appropriate. Fig(s) 1CU. ☐ Solid black shading not used for entire contours. Fig(s) 1CV. ☐ Sectional drawings. 37 CFR 1.152CW. ☐ Surface shading shown not appropriate. Fig(s) 1CX. ☐ Solid black shading not used for entire contours. Fig(s) 1CY. ☐ Sectional drawings. 37 CFR 1.152CZ. ☐ Surface shading shown not appropriate. Fig(s) 1DA. ☐ Solid black shading not used for entire contours. Fig(s) 1DB. ☐ Sectional drawings. 37 CFR 1.152DC. ☐ Surface shading shown not appropriate. Fig(s) 1DD. ☐ Solid black shading not used for entire contours. Fig(s) 1DE. ☐ Sectional drawings. 37 CFR 1.152DF. ☐ Surface shading shown not appropriate. Fig(s) 1DG. ☐ Solid black shading not used for entire contours. Fig(s) 1DH. ☐ Sectional drawings. 37 CFR 1.152DI. ☐ Surface shading shown not appropriate. Fig(s) 1DJ. ☐ Solid black shading not used for entire contours. Fig(s) 1DK. ☐ Sectional drawings. 37 CFR 1.152DL. ☐ Surface shading shown not appropriate. Fig(s) 1DM. ☐ Solid black shading not used for entire contours. Fig(s) 1DN. ☐ Sectional drawings. 37 CFR 1.152DO. ☐ Surface shading shown not appropriate. Fig(s) 1DP. ☐ Solid black shading not used for entire contours. Fig(s) 1DQ. ☐ Sectional drawings. 37 CFR 1.152DR. ☐ Surface shading shown not appropriate. Fig(s) 1DS. ☐ Solid black shading not used for entire contours. Fig(s) 1DT. ☐ Sectional drawings. 37 CFR 1.152DU. ☐ Surface shading shown not appropriate. Fig(s) 1DV. ☐ Solid black shading not used for entire contours. Fig(s) 1DW. ☐ Sectional drawings. 37 CFR 1.152DX. ☐ Surface shading shown not appropriate. Fig(s) 1DY. ☐ Solid black shading not used for entire contours. Fig(s) 1DZ. ☐ Sectional drawings. 37 CFR 1.152EA. ☐ Surface shading shown not appropriate. Fig(s) 1EB. ☐ Solid black shading not used for entire contours. Fig(s) 1EC. ☐ Sectional drawings. 37 CFR 1.152ED. ☐ Surface shading shown not appropriate. Fig(s) 1EE. ☐ Solid black shading not used for entire contours. Fig(s) 1EF. ☐ Sectional drawings. 37 CFR 1.152EG. ☐ Surface shading shown not appropriate. Fig(s) 1EH. ☐ Solid black shading not used for entire contours. Fig(s) 1EI. ☐ Sectional drawings. 37 CFR 1.152EJ. ☐ Surface shading shown not appropriate. Fig(s) 1EK. ☐ Solid black shading not used for entire contours. Fig(s) 1EL. ☐ Sectional drawings. 37 CFR 1.152EM. ☐ Surface shading shown not appropriate. Fig(s) 1EN. ☐ Solid black shading not used for entire contours. Fig(s) 1EO. ☐ Sectional drawings. 37 CFR 1.152EP. ☐ Surface shading shown not appropriate. Fig(s) 1EQ. ☐ Solid black shading not used for entire contours. Fig(s) 1ER. ☐ Sectional drawings. 37 CFR 1.152ES. ☐ Surface shading shown not appropriate. Fig(s) 1ET. ☐ Solid black shading not used for entire contours. Fig(s) 1EU. ☐ Sectional drawings. 37 CFR 1.152EV. ☐ Surface shading shown not appropriate. Fig(s) 1EW. ☐ Solid black shading not used for entire contours. Fig(s) 1EX. ☐ Sectional drawings. 37 CFR 1.152EY. ☐ Surface shading shown not appropriate. Fig(s) 1EZ. ☐ Solid black shading not used for entire contours. Fig(s) 1FA. ☐ Sectional drawings. 37 CFR 1.152FB. ☐ Surface shading shown not appropriate. Fig(s) 1FC. ☐ Solid black shading not used for entire contours. Fig(s) 1FD. ☐ Sectional drawings. 37 CFR 1.152FE. ☐ Surface shading shown not appropriate. Fig(s) 1FF. ☐ Solid black shading not used for entire contours. Fig(s) 1FG. ☐ Sectional drawings. 37 CFR 1.152FH. ☐ Surface shading shown not appropriate. Fig(s) 1FI. ☐ Solid black shading not used for entire contours. Fig(s) 1FJ. ☐ Sectional drawings. 37 CFR 1.152FK. ☐ Surface shading shown not appropriate. Fig(s) 1FL. ☐ Solid black shading not used for entire contours. Fig(s) 1FM. ☐ Sectional drawings. 37 CFR 1.152FN. ☐ Surface shading shown not appropriate. Fig(s) 1FO. ☐ Solid black shading not used for entire contours. Fig(s) 1FP. ☐ Sectional drawings. 37 CFR 1.152FQ. ☐ Surface shading shown not appropriate. Fig(s) 1FR. ☐ Solid black shading not used for entire contours. Fig(s) 1FS. ☐ Sectional drawings. 37 CFR 1.152FT. ☐ Surface shading shown not appropriate. Fig(s) 1FU. ☐ Solid black shading not used for entire contours. Fig(s) 1FV. ☐ Sectional drawings. 37 CFR 1.152FW. ☐ Surface shading shown not appropriate. Fig(s) 1FX. ☐ Solid black shading not used for entire contours. Fig(s) 1FY. ☐ Sectional drawings. 37 CFR 1.152FZ. ☐ Surface shading shown not appropriate. Fig(s) 1GA. ☐ Solid black shading not used for entire contours. Fig(s) 1GB. ☐ Sectional drawings. 37 CFR 1.152GC. ☐ Surface shading shown not appropriate. Fig(s) 1GD. ☐ Solid black shading not used for entire contours. Fig(s) 1GE. ☐ Sectional drawings. 37 CFR 1.152GF. ☐ Surface shading shown not appropriate. Fig(s) 1GG. ☐ Solid black shading not used for entire contours. Fig(s) 1GH. ☐ Sectional drawings. 37 CFR 1.152GI. ☐ Surface shading shown not appropriate. Fig(s) 1GJ. ☐ Solid black shading not used for entire contours. Fig(s) 1GK. ☐ Sectional drawings. 37 CFR 1.152GL. ☐ Surface shading shown not appropriate. Fig(s) 1GM. ☐ Solid black shading not used for entire contours. Fig(s) 1GN. ☐ Sectional drawings. 37 CFR 1.152GO. ☐ Surface shading shown not appropriate. Fig(s) 1GP. ☐ Solid black shading not used for entire contours. Fig(s) 1GQ. ☐ Sectional drawings. 37 CFR 1.152GR. ☐ Surface shading shown not appropriate. Fig(s) 1GS. ☐ Solid black shading not used for entire contours. Fig(s) 1GT. ☐ Sectional drawings. 37 CFR 1.152GU. ☐ Surface shading shown not appropriate. Fig(s) 1GV. ☐ Solid black shading not used for entire contours. Fig(s) 1GW. ☐ Sectional drawings. 37 CFR 1.152GX. ☐ Surface shading shown not appropriate. Fig(s) 1GY. ☐ Solid black shading not used for entire contours. Fig(s) 1GZ. ☐ Sectional drawings. 37 CFR 1.152HA. ☐ Surface shading shown not appropriate. Fig(s) 1HB. ☐ Solid black shading not used for entire contours. Fig(s) 1HC. ☐ Sectional drawings. 37 CFR 1.152HD. ☐ Surface shading shown not appropriate. Fig(s) 1HE. ☐ Solid black shading not used for entire contours. Fig(s) 1HF. ☐ Sectional drawings. 37 CFR 1.152HG. ☐ Surface shading shown not appropriate. Fig(s) 1HH. ☐ Solid black shading not used for entire contours. Fig(s) 1

**Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01**

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes **incorporated** therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.